

Notice of Allowability

Application No.

09/870,496

Examiner

Elizabeth A. Bolden

Applicant(s)

NAKASHIMA ET AL.

Art Unit

1755

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address–

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 18 February 2005.
2. ☒ The allowed claim(s) is/are 1,3,5,6,9,11,13,14,16,17,19,20,23 and 26-28.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

KARL GROUP
PRIMARY EXAMINER
GROUP 1755

DETAILED ACTION
EXAMINER'S AMENDMENT

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kirsten A. Grueneberg on 16 May 2005.

The application has been amended as follows:

Claims 18, 21, and 22 have been canceled.

In Claim 17, line 4 after the word "substrate", the phrase - -as claimed in Claim 1- - has been inserted.

In Claim 19, line 1 the phrase "glass substrate" has been deleted and the phrase - -magnetic disk- - has been inserted.

In Claim 20, line 1 the phrase "glass substrate" has been deleted and the phrase - -magnetic disk- - has been inserted.

In Claim 23, lines 1 and 2 the phrase "glass substrate" has been deleted and the phrase - -magnetic disk- - has been inserted.

In Claim 23, lines 4 and 5 the phrase ", and the number of attachments having sizes ranging from 1 μm to less than 10 μm so present, is not more than $10^5/\text{cm}^2$ " has been deleted.

Art Unit: 1755

Allowable Subject Matter

Claims 1, 3, 5, 6, 9, 11, 13, 14, 16, 17, 19, 20, 23, and 26-28 are allowed.

Reason for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art fail to disclose or suggest a glass substrate composition having the composition as recited in the instant claims, which result in the recited properties specifically the thermal expansion coefficient, glass transition temperature and the number of attachments.

The closest prior art is deemed to be U.S. Patent 5,854,152 by Kohli et al. and U.S. Patent 6,162,750 by Miwa et al. Kohli et al. disclose a similar composition but do not teach the range of the number of attachments. While Miwa et al. disclose a similar composition but does not teach the range of the number of attachments not the glass transition temperature. Both Kohli et al. and Miwa et al. fail to expressly disclose or suggest the combined ranges for ZrO_2+TiO_2 and $Al_2O_3+TiO_2$.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 9:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**** Please note that the Examiner, Elizabeth A. Bolden will be out of the office for an extended period of time starting on 2 June 2005 and returning approximately 27 June 2005. You can leave me a voicemail message, which I will try to check intermit tally, otherwise please contact my supervisor Jerry Lorengo at the above telephone number. Sorry for this inconvenience. ****

EAB

16 May 2005


KARL GROUP
PRIMARY EXAMINER
GROUP 1755